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Biannual TIP/RTP Conformity Analysis and TIP Amendments

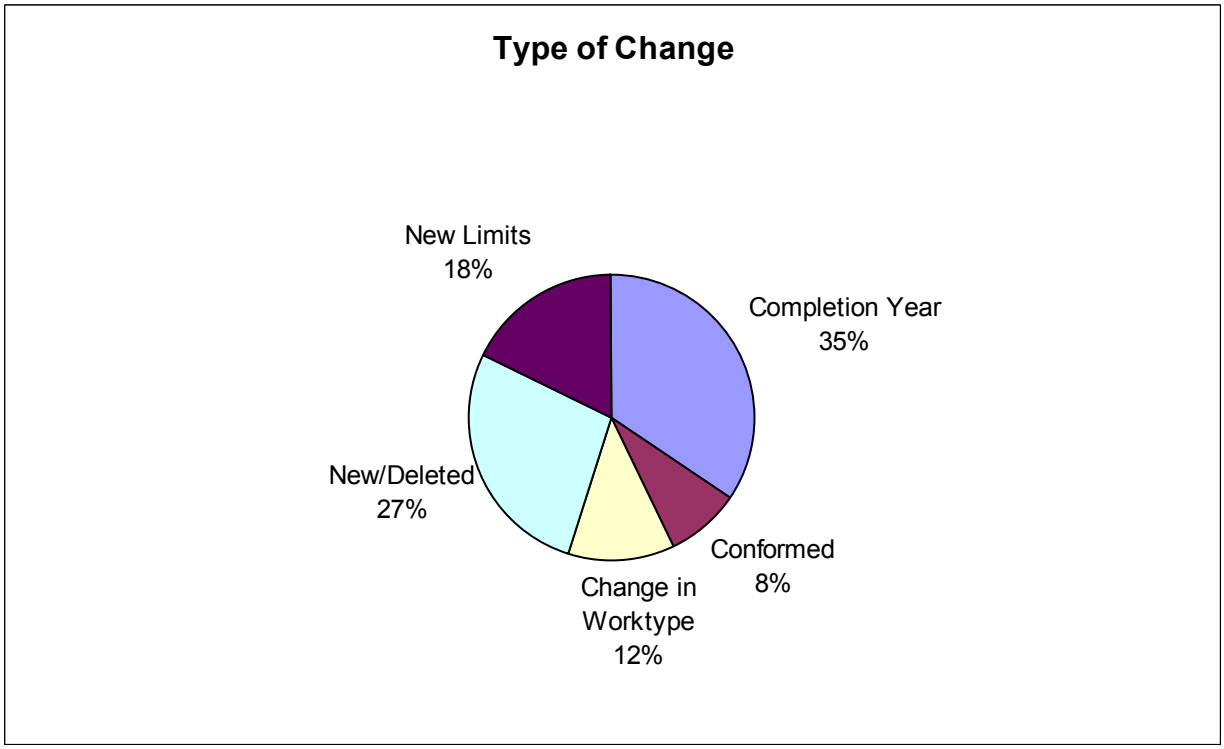
In accordance with the biannual conformity analysis policy, CMAP staff asked programmers to submit changes to non-exempt and exempt tested projects within the TIP. Programmers submitted eighty-four revisions to seventy-five projects. Specific project information is attached.

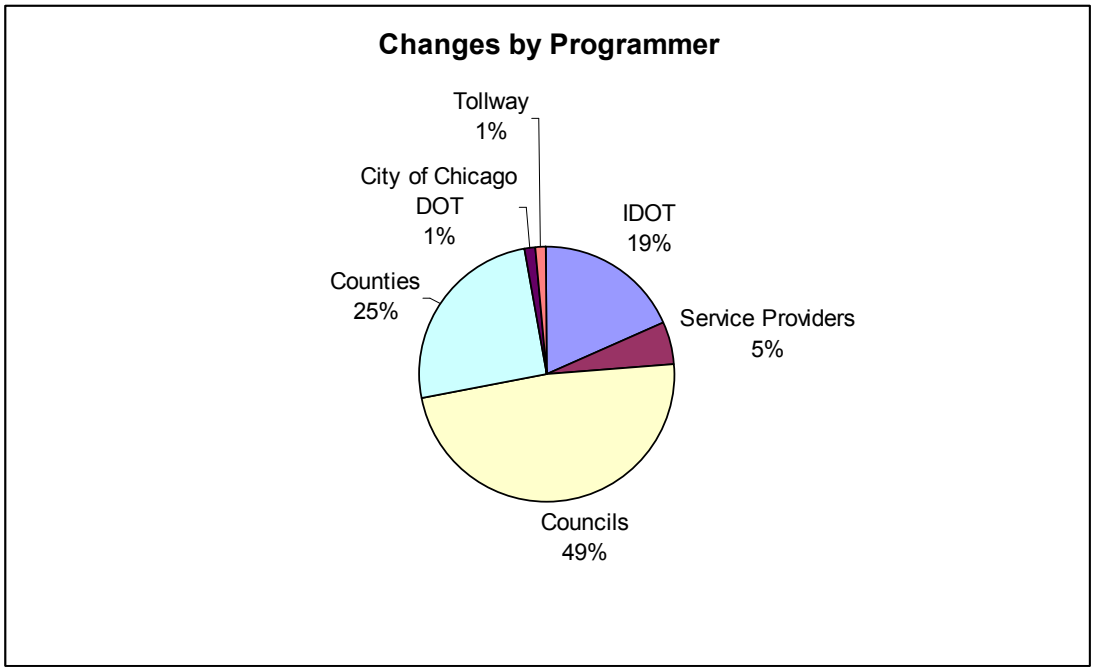
Ten of the requested revisions included adding, changing, or removing work types. Work types describe the work being completed in a project and determine if a project is exempt, exempt tested or non-exempt. An exempt work type does not require an air quality conformity analysis. Examples of exempt projects include road resurfacings and bus rehabilitation. Exempt tested work types do not require a conformity analysis, but the region has chosen to include their impacts in the travel demand model. Exempt tested projects include widening lanes to standard and continuous left turn lanes. Non-exempt projects may have an effect on air quality and must be tested for conformity. Non-exempt projects include adding lanes to a road or extending a rail line.

Seven of the requested revisions were to change the conformity status from not conformed to conformed. Federally funded phase 1 engineering can proceed on a non-exempt project not conformed project, but federal authorization for further phases generally requires conformity.

There were fifteen limit changes. Limits are the cross-streets, mileposts or other boundaries that define the extent of a project. There were six new projects and seventeen deleted projects.

Twenty nine projects had new completion years that triggered inclusion in the conformity analysis. Completion years indicate when a project is anticipated to be in service to users. The conformity analysis looks at selected years of the long range regional transportation plan (currently 2010, 2020 and 2030). When a completion year change crosses one of these years, the project must be included in the conformity analysis.





The 2010, 2020 and 2030 highway and transit networks were coded to include the changes. CMAP's regional travel demand model was run using the updated networks. The resultant VMT by speed and facility type for eight vehicle classes (including urban bus) was expanded to twenty-eight MOBILE vehicle types for multiplication by regional emission rates developed using the USEPA's MOBILE model. The highway emission estimates are the sum of those calculations for each precursor or direct pollutant in each scenario year. Reductions from the National Energy Policy Act Credit and Clean Fuel Fleet Program have not been claimed.

For ozone, emissions of the two precursors, volatile organic compounds and nitrogen oxides were calculated. The results fell below applicable SIP emission budgets for the attainment year and subsequent years; they were very similar to emission estimates from the conformity analysis documentation for the 2030 RTP Update and FY 07-12 TIP approved in October, 2006.

For $PM_{2.5}$ emissions were calculated for direct $PM_{2.5}$ and the precursor nitrogen oxides. Emissions for all scenario years remained below the baseline year values.

CMAP recommends that a determination be made that the region's transportation plan and program satisfy all applicable criteria and procedures in the conformity regulations and comply with all applicable implementation plan conformity requirements.

Northeastern Illinois Transportation Improvement Program Amendment
Conformity Analysis Summary Results

$PM_{2.5}$

		Fine Particulate Matter				Nitrogen Oxides			
Year	Annual VMT	Global rate (gm/mi)	Tons	Northwest Indiana	Nonattain-ment area Total	Global rate (gm/mi)	Tons	Northwest Indiana	Nonattain-ment area Total
2002	58,696,684,998	0.0475	3,070.78	562.64	3,633.42	2.5908	167,630.81	30,397.97	198,028.78
2010	64,277,978,335	0.0243	1,722.66	158.90	1,881.56	1.1824	83,779.86	8,442.66	92,222.52
2020	69,128,864,124	0.0139	1,057.13	114.32	1,171.45	0.3604	27,464.63	3,004.68	30,469.31
2030	73,718,843,928	0.0127	1,030.01	116.46	1,146.47	0.2353	19,120.18	2,065.23	21,185.41

Ozone

		VOC			NOx		
Year	Summer Day VMT	Global rate (gm/mi)	Tons	SIP	Global rate (gm/mi)	Tons	SIP
2007	176,951,339	0.6238862	121.69	127.42	1.4346931	279.84	280.40
2010	182,866,817	0.4660281	93.94	127.42	1.0959892	220.92	280.40
2020	196,160,728	0.2401002	51.92	127.42	0.3327261	71.94	280.40
2030	209,722,313	0.2274779	52.59	127.42	0.2126504	49.16	280.40

Notes

Off-model benefits are not included in the total emissions estimates
NIRPC values from analysis of December, 2008
2007 ozone values from conformity analysis approved in October, 2006

Conformity Analysis Summary.xls January 7, 2009 1/8/2009 9:17 AM